

SIFAT FUNGSIONAL TELUR HASIL SILANGAN AYAM MERAWANG BANGKA DAN MURUNG PANGGANG DENGAN KAMPUNG UNGGUL BALITBANGTAN (KUB) BOGOR

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INTISARI

Telur merupakan bahan pangan yang mengandung nilai gizi lengkap. Karena sifat fungsionalnya, telur biasa dimanfaatkan sebagai dasar pengolahan makanan. Penelitian ini bertujuan untuk mengevaluasi sifat fungsional telur ayam lokal dari persilangan antara ayam Merawang Bangka dengan KUB Bogor, dan persilangan antara ayam Murung Panggang dengan KUB Bogor. Parameter pengujian sifat fungsional telur yaitu sifat buih yang meliputi kapasitas, kepadatan, dan stabilitas buih; sifat emulsi yang meliputi stabilitas dan kapasitas emulsi; dan daya ikat air *albumen*. Penelitian dilakukan dengan 6 kali pengulangan untuk setiap jenis telur umur 0 hari. Data dianalisis menggunakan *independent sample t-test*. Hasil penelitian menunjukkan telur hasil persilangan antara ayam Merawang Bangka dan KUB Bogor memiliki kapasitas buih 837,5%; kepadatan buih 123,87 mg/ml; stabilitas buih 49,10%; kapasitas emulsi 7,322 ml oil/g *yolk*; stabilitas emulsi 0,099 ml/menit; dan daya ikat air 77,76%, sedangkan telur persilangan ayam Murung Panggang dan KUB Bogor memiliki kapasitas buih 513,33%; kepadatan buih 174,965 mg/ml; stabilitas buih 55,73%; kapasitas emulsi 7,778 ml oil/g *yolk*; stabilitas emulsi 0,107 ml/menit; dan daya ikat air 80,41%. Hasil penelitian menunjukkan terdapatnya perbedaan yang signifikan ($P < 0,05$) pada kapasitas dan kepadatan buih *albumen*. Tidak terdapat perbedaan pada stabilitas buih *albumen*, sifat emulsi *yolk*, dan daya ikat air *albumen* pada kedua telur hasil persilangan. Kesimpulannya berdasarkan kapasitas buih putih telur persilangan ayam Merawang Bangka dan KUB Bogor lebih tinggi tetapi kepadatan buih putih telur yang lebih bagus yaitu pada persilangan Murung Panggang dan KUB Bogor. Perbedaan jenis silangan ayam lokal tidak mempengaruhi stabilitas buih dan sifat gel *albumen*, serta sifat emulsi *yolk* pada telur yang dihasilkan.

(Kata kunci: Telur ayam, Sifat fungsional telur, KUB Bogor, Merawang Bangka, Murung Panggang).

**FUNCTIONAL PROPERTIES OF CROSSBREED EGGS BY
MERAWANG BANGKA AND MURUNG PANGGANG
CHICKEN WITH KAMPUNG UNGGUL
BALITBANGTAN (KUB) BOGOR
CHICKEN**

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ABSTRACT

Egg offers complete nutritional value. Eggs are commonly utilized in food processing due to their functional properties. The objective of this study was to compare the qualities and functions of Merawang Bangka with KUB Bogor and Murung Panggang with KUB Bogor chicken eggs. Foaming qualities of albumen included capacity, density, and foam stability; emulsion properties of yolk included emulsion capacity and stability, and gelling properties of albumen included water-holding capacity. Each test was conducted six times for each variety of 0-day-old chicken eggs. The data were examined using a t-test for independent samples. Crossbreed chicken eggs between Merawang Bangka and KUB Bogor had foam capacity of 837.5%, foam density of 123.87 mg/ml, foam stability of 49.10%, emulsion capacity of 7.322 ml oil/g yolk, emulsion stability of 0.099 ml/min, and water holding capacity of 77.76%, whereas crossbreed chicken eggs between Murung Panggang and KUB Bogor had foam that outcome revealed a statistically significant difference ($P < 0.05$) in the capacity and density of albumen foam. The albumen foam stability, water-holding capacity, and yolk emulsifying capabilities of both eggs were identical. In conclusion based on the fact that the egg foam capacity of Merawang Bangka and KUB Bogor eggs was greater, whereas the albumen foam density of Murung Panggang and KUB Bogor eggs was greater. The stability of albumen foam, water-binding capacity, and yolk emulsion properties of both crossbred chicken eggs were unaffected by differences in crossbreed chicken eggs.

(Keyword: Chicken egg, Functional properties, KUB Bogor, Merawang Bangka, Murung Panggang).